

*EFS*

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/655,543 A  
Source: 1 Fw16.  
Date Processed by STIC: 12/27/06

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IFW16

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/655,543A

DATE: 12/27/2006

TIME: 13:54:26

HLL-ST25.txt

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Output Set: N:\CRF4\12272006\J655543A.raw

3 <110> APPLICANT: Shattuck, Donna M.  
 4 Stone, Steven  
 5 Russell, Deanna L  
 6 Abkevich, Victor  
 7 Hunt, Steven  
 9 <120> TITLE OF INVENTION: OBESITY GENE AND USE THEREOF  
 11 <130> FILE REFERENCE: 1312.03  
 13 <140> CURRENT APPLICATION NUMBER: US 10/655,543A  
 14 <141> CURRENT FILING DATE: 2003-09-03  
 16 <160> NUMBER OF SEQ ID NOS: 108  
 18 <170> SOFTWARE: PatentIn version 3.3  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 3507  
 22 <212> TYPE: DNA  
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| 28 tttggcctgc  | agctgggtgg  | ctccctgcct  | gtgcattccc | tgaccaccat   | gcccatgctg   | 120  |
| 30 ccctgggttg  | tggctgaggt  | gcgaagactc  | agcaggcagt | ccaccagaaa   | ggaacctgta   | 180  |
| 32 accaagcaag  | tccggcttgc  | cgtttcaccc  | tctggactga | gatgtgaacc   | tgagccaggg   | 240  |
| 34 agaagtcaac  | agtgggatcc  | cctgatctat  | tccagcatct | ttgagtgc当地   | gcctcagcgt   | 300  |
| 36 gttcacaaac  | tgattcacaa  | cagtcatac   | ccaagttact | ttgcttgc当地   | gattaaggaa   | 360  |
| 38 gacgctgtcc  | accggcagag  | tatctgctat  | gtgttcaaag | ccgatgatca   | aacaaaagtg   | 420  |
| 40 cctgagatca  | tcagctccat  | ccgtcaggcg  | ggaaagatcg | ccccgcagga   | ggagctgcac   | 480  |
| 42 tgccgtccg   | agttcgacga  | cacgtttcc   | aagaagttcg | aggtgcttct   | ctgcggccgc   | 540  |
| 44 gtgacgggtgg | cgcacaagaa  | ggctccgcgc  | gcctcgatcg | acgagtgcat   | cgagaagttc   | 600  |
| 46 aatcacgtca  | gccccggcc   | gggttccgag  | agccccgc   | ccaacccgc    | ccatgccgc    | 660  |
| 48 cccacaggga  | gccaggagcc  | tgtgcgcagg  | cccatgcgc  | agtccttc     | ccagccggc    | 720  |
| 50 ctgcgtcgc   | tggcctttag  | gaaggagctg  | caggatgggg | gcctccgaag   | cagcggcttc   | 780  |
| 52 ttcagctcct  | tcgaggagag  | cgacatttag  | aaccacctca | ttagcggaca   | aatattgtg    | 840  |
| 54 cagcccacag  | atatcgagga  | aaatcgaact  | atgctttca  | cgattggca    | gtctgaagtt   | 900  |
| 56 tacccatca   | gtcctgacac  | caaaaaata   | gcattggaga | aaaattttaa   | ggagatatcc   | 960  |
| 58 ttttgcctc   | agggcatcag  | acacgtggac  | cactttgggt | ttatctgtcg   | ggagtcttcc   | 1020 |
| 60 ggagggtggcg | gctttcattt  | tgtctgtac   | gtgtttcagt | gcacaaaatga  | ggctctggtt   | 1080 |
| 62 gatgaaatta  | tgtatgaccct | gaaacaggcc  | ttcacggtgg | ccgcagtgc    | gcagacagct   | 1140 |
| 64 aaggcgccag  | cccagctgtg  | tgagggctgc  | ccctgc当地   | gcctgc当地     | gctctgtgag   | 1200 |
| 66 aggatagagg  | gaatgaattc  | ttccaaaaca  | aaactagaac | tgccaaaagca  | cctgacgaca   | 1260 |
| 68 ttaaccaatc  | aggagcaggc  | gactat      | tttttttt   | gaagaggttc   | agaaaattttag | 1320 |
| 70 gagcagcgag  | agaatgaatt  | gattatttct  | tttctgagat | gtttatatga   | agagaaaacag  | 1380 |
| 72 aaagaacaca  | tccatattgg  | ggagatgaag  | cagacatgc  | agatggcagc   | agagaatatt   | 1440 |
| 74 ggaagtgaat  | taccacccag  | tgccactcga  | tttaggctag | atatgctgaa   | aaacaaagca   | 1500 |
| 76 aagagatctt  | taacagagtc  | tttagaaaagt | attttgc当地  | gggtaataa    | agccagaggc   | 1560 |
| 78 ctgcaggaac  | actccatcag  | tgtggatctg  | gatagctccc | tgtctagtagac | attaagtaac   | 1620 |

*see p. 6*

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| 80  | accagcaaag  | agccatctgt  | gtgtgaaaag   | gaggccttgc  | ccatctctga  | gagctccttt  | 1680 |     |     |     |     |     |     |     |     |     |    |
| 82  | aagctcctcg  | gctcctcgga  | ggacctgtcc   | agtgactcgg  | agagtcatct  | cccagaagag  | 1740 |     |     |     |     |     |     |     |     |     |    |
| 84  | ccagctccgc  | tgtcgccccca | gcaggccttc   | aggaggcgag  | caaacaccct  | gagtcacttc  | 1800 |     |     |     |     |     |     |     |     |     |    |
| 86  | cccatcgaat  | gccaggaacc  | tccacaacct   | gcccgggggt  | ccccgggggt  | ttcgcaaagg  | 1860 |     |     |     |     |     |     |     |     |     |    |
| 88  | aaacttatga  | ggtatcactc  | agtgagcaca   | gagacgcctc  | atgaacgaaa  | ggactttgaa  | 1920 |     |     |     |     |     |     |     |     |     |    |
| 90  | tccaaagcaa  | accatctgg   | tgattctgg    | gggactcctg  | tgaagacccg  | gaggcattcc  | 1980 |     |     |     |     |     |     |     |     |     |    |
| 92  | tggagggcagc | agatattcct  | ccgagtagcc   | accccgcaga  | aggcgtgcga  | ttcttcagc   | 2040 |     |     |     |     |     |     |     |     |     |    |
| 94  | agatatgaag  | attattcaga  | gctggagag    | cttcccccac  | gatctcctt   | agaaccagtt  | 2100 |     |     |     |     |     |     |     |     |     |    |
| 96  | tgtaaagatg  | ggccctttgg  | ccccccacca   | gaggaaaaaga | aaaggacatc  | tcgtgagctc  | 2160 |     |     |     |     |     |     |     |     |     |    |
| 98  | cgagagctgt  | ggcaaaaggc  | tattttcaa    | cagatactgc  | tgcttagaat  | ggagaaggaa  | 2220 |     |     |     |     |     |     |     |     |     |    |
| 100 | aatcagaagc  | tccaaggcctc | tgaaaatgt    | ttgctgaaca  | agcgcctgaa  | gctcgattat  | 2280 |     |     |     |     |     |     |     |     |     |    |
| 102 | gaagaaatta  | ctccctgtct  | taaagaagta   | actacagtgt  | ggggaaaagat | gcttagcact  | 2340 |     |     |     |     |     |     |     |     |     |    |
| 104 | ccaggaagat  | caaaaattaa  | gttgcacatg   | gaaaaaatgc  | actcggctgt  | tggcaaggt   | 2400 |     |     |     |     |     |     |     |     |     |    |
| 106 | gtgccacgtc  | atcacccgagg | tgaaaatctgg  | aaatttctag  | ctgagcaatt  | ccacctaataa | 2460 |     |     |     |     |     |     |     |     |     |    |
| 108 | caccagtttc  | ccagcaaaaca | gcagccaaag   | gatgtgccat  | acaaagaact  | cttaaagcag  | 2520 |     |     |     |     |     |     |     |     |     |    |
| 110 | ctgacttccc  | agcagcatgc  | gattcttatt   | gaccttggc   | gaaccttcc   | tacacaccca  | 2580 |     |     |     |     |     |     |     |     |     |    |
| 112 | tacttctctg  | cccagcttgg  | agcaggacag   | ctatcgctt   | acaacattt   | gaaggcctac  | 2640 |     |     |     |     |     |     |     |     |     |    |
| 114 | tcacttcttag | accaggaagt  | gggatattgc   | caaggctca   | gctttgttagc | aggcattttg  | 2700 |     |     |     |     |     |     |     |     |     |    |
| 116 | cttcttcata  | tgagtgagga  | agaggcggtt   | aaaatgctca  | agtttctgtat | gtttgacatg  | 2760 |     |     |     |     |     |     |     |     |     |    |
| 118 | gggtgcgg    | aacagtatcg  | gccagacatg   | attattttac  | agatccagat  | gtaccagctc  | 2820 |     |     |     |     |     |     |     |     |     |    |
| 120 | tcgagggtgc  | ttcatgatta  | ccacagagac   | ctctacaatc  | acctggagga  | gcacgagatc  | 2880 |     |     |     |     |     |     |     |     |     |    |
| 122 | ggccccagcc  | tctacgctgc  | cccctgggtc   | ctcaccatgt  | ttgcctcaca  | gttcccgctg  | 2940 |     |     |     |     |     |     |     |     |     |    |
| 124 | ggattcgtag  | ccagagtctt  | tgatatgatt   | tttcttcagg  | gaacagaggt  | catatttaaa  | 3000 |     |     |     |     |     |     |     |     |     |    |
| 126 | gtggcttaa   | gtctgttgg   | aagccataag   | cccttgattc  | tgcagcatga  | aaacctagaa  | 3060 |     |     |     |     |     |     |     |     |     |    |
| 128 | accatagttg  | actttataaa  | aagcacgcta   | cccaaccttgc | gttggtaca   | gatggaaaag  | 3120 |     |     |     |     |     |     |     |     |     |    |
| 130 | accatcaatc  | aggtatttga  | aatggacatc   | gctaaacagt  | tacaagctt   | tgaagttgag  | 3180 |     |     |     |     |     |     |     |     |     |    |
| 132 | taccacgtcc  | ttcaagaaga  | acttatacgat  | tcctctcctc  | tcagtgacaaa | ccaaagaatg  | 3240 |     |     |     |     |     |     |     |     |     |    |
| 134 | gataaaattag | agaaaaccaa  | cagcagctta   | cgcaaacaga  | accttgacct  | ccttgaacag  | 3300 |     |     |     |     |     |     |     |     |     |    |
| 136 | ttcaggtgg   | caaatggtag  | gatccaaagc   | cttgaggcca  | ccattgagaa  | gctctgagc   | 3360 |     |     |     |     |     |     |     |     |     |    |
| 138 | agtgagagca  | agctgaagca  | ggccatgctt   | accttagaac  | tggagcggtc  | ggccctgctg  | 3420 |     |     |     |     |     |     |     |     |     |    |
| 140 | cagacggtgg  | aggagctgcg  | gccccggagc   | gcagagccca  | gcgaccggga  | gcctgagtgc  | 3480 |     |     |     |     |     |     |     |     |     |    |
| 142 | acgcagcccg  | agccccacggg | cgactga      |             |             |             | 3507 |     |     |     |     |     |     |     |     |     |    |
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| 152 | Met         | Glu         | Pro          | Ile         | Thr         | Phe         | Thr  | Ala | Arg | Lys | His | Leu | Leu | Ser | Asn | Glu |    |
| 153 | 1           |             |              |             |             | 5           |      |     |     | 10  |     |     |     |     | 15  |     |    |
| 156 | Val         | Ser         | Val          | Asp         | Phe         | Gly         | Leu  | Gln | Leu | Val | Gly | Ser | Leu | Pro | Val | His |    |
| 157 |             |             |              |             |             |             | 20   |     |     | 25  |     |     |     |     | 30  |     |    |
| 160 | Ser         | Leu         | Thr          | Thr         | Met         | Pro         | Met  | Leu | Pro | Trp | Val | Val | Ala | Glu | Val | Arg |    |
| 161 |             |             |              |             |             |             | 35   |     |     | 40  |     |     |     |     | 45  |     |    |
| 164 | Arg         | Leu         | Ser          | Arg         | Gln         | Ser         | Thr  | Arg | Lys | Glu | Pro | Val | Thr | Lys | Gln | Val |    |
| 165 |             |             |              |             |             |             |      |     |     | 50  |     |     |     |     | 55  |     | 60 |
| 168 | Arg         | Leu         | Cys          | Val         | Ser         | Pro         | Ser  | Gly | Leu | Arg | Cys | Glu | Pro | Glu | Pro | Gly |    |
| 169 |             |             |              |             |             |             |      |     |     | 65  |     |     |     |     | 70  |     | 75 |
| 172 | Arg         | Ser         | Gln          | Gln         | Trp         | Asp         | Pro  | Leu | Ile | Tyr | Ser | Ser | Ile | Phe | Glu | Cys |    |
| 173 |             |             |              |             |             |             |      |     |     | 85  |     |     |     |     | 90  |     | 95 |

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 177 100 105 110  
 180 Tyr Phe Ala Cys Leu Ile Lys Glu Asp Ala Val His Arg Gln Ser Ile  
 181 115 120 125  
 184 Cys Tyr Val Phe Lys Ala Asp Asp Gln Thr Lys Val Pro Glu Ile Ile  
 185 130 135 140  
 188 Ser Ser Ile Arg Gln Ala Gly Lys Ile Ala Arg Gln Glu Glu Leu His  
 189 145 150 155 160  
 192 Cys Pro Ser Glu Phe Asp Asp Thr Phe Ser Lys Lys Phe Glu Val Leu  
 193 165 170 175  
 196 Phe Cys Gly Arg Val Thr Val Ala His Lys Lys Ala Pro Pro Ala Leu  
 197 180 185 190  
 200 Ile Asp Glu Cys Ile Glu Lys Phe Asn His Val Ser Gly Ser Arg Gly  
 201 195 200 205  
 204 Ser Glu Ser Pro Arg Pro Asn Pro Pro His Ala Ala Pro Thr Gly Ser  
 205 210 215 220  
 208 Gln Glu Pro Val Arg Arg Pro Met Arg Lys Ser Phe Ser Gln Pro Gly  
 209 225 230 235 240  
 212 Leu Arg Ser Leu Ala Phe Arg Lys Glu Leu Gln Asp Gly Gly Leu Arg  
 213 245 250 255  
 216 Ser Ser Gly Phe Phe Ser Ser Phe Glu Glu Ser Asp Ile Glu Asn His  
 217 260 265 270  
 220 Leu Ile Ser Gly His Asn Ile Val Gln Pro Thr Asp Ile Glu Glu Asn  
 221 275 280 285  
 224 Arg Thr Met Leu Phe Thr Ile Gly Gln Ser Glu Val Tyr Leu Ile Ser  
 225 290 295 300  
 228 Pro Asp Thr Lys Lys Ile Ala Leu Glu Lys Asn Phe Lys Glu Ile Ser  
 229 305 310 315 320  
 232 Phe Cys Ser Gln Gly Ile Arg His Val Asp His Phe Gly Phe Ile Cys  
 233 325 330 335  
 236 Arg Glu Ser Ser Gly Gly Gly Phe His Phe Val Cys Tyr Val Phe  
 237 340 345 350  
 240 Gln Cys Thr Asn Glu Ala Leu Val Asp Glu Ile Met Met Thr Leu Lys  
 241 355 360 365  
 244 Gln Ala Phe Thr Val Ala Ala Val Gln Gln Thr Ala Lys Ala Pro Ala  
 245 370 375 380  
 248 Gln Leu Cys Glu Gly Cys Pro Leu Gln Ser Leu His Lys Leu Cys Glu  
 249 385 390 395 400  
 252 Arg Ile Glu Gly Met Asn Ser Ser Lys Thr Lys Leu Glu Leu Gln Lys  
 253 405 410 415  
 256 His Leu Thr Thr Leu Thr Asn Gln Glu Gln Ala Thr Ile Phe Glu Glu  
 257 420 425 430  
 260 Val Gln Lys Leu Arg Pro Arg Asn Glu Gln Arg Glu Asn Glu Leu Ile  
 261 435 440 445  
 264 Ile Ser Phe Leu Arg Cys Leu Tyr Glu Glu Lys Gln Lys Glu His Ile  
 265 450 455 460  
 268 His Ile Gly Glu Met Lys Gln Thr Ser Gln Met Ala Ala Glu Asn Ile  
 269 465 470 475 480  
 272 Gly Ser Glu Leu Pro Pro Ser Ala Thr Arg Phe Arg Leu Asp Met Leu

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| 273   | 485 | 490 | 495 |
| 276 Lys Asn Lys Ala Lys Arg Ser Leu Thr Glu Ser Leu Glu Ser Ile Leu |     |     |     |
| 277   | 500 | 505 | 510 |
| 280 Ser Arg Gly Asn Lys Ala Arg Gly Leu Gln Glu His Ser Ile Ser Val |     |     |     |
| 281   | 515 | 520 | 525 |
| 284 Asp Leu Asp Ser Ser Leu Ser Ser Thr Leu Ser Asn Thr Ser Lys Glu |     |     |     |
| 285   | 530 | 535 | 540 |
| 288 Pro Ser Val Cys Glu Lys Glu Ala Leu Pro Ile Ser Glu Ser Ser Phe |     |     |     |
| 289   | 545 | 550 | 555 |
| 292 Lys Leu Leu Gly Ser Ser Glu Asp Leu Ser Ser Asp Ser Glu Ser His |     |     |     |
| 293   | 565 | 570 | 575 |
| 296 Leu Pro Glu Glu Pro Ala Pro Leu Ser Pro Gln Gln Ala Phe Arg Arg |     |     |     |
| 297   | 580 | 585 | 590 |
| 300 Arg Ala Asn Thr Leu Ser His Phe Pro Ile Glu Cys Gln Glu Pro Pro |     |     |     |
| 301   | 595 | 600 | 605 |
| 304 Gln Pro Ala Arg Gly Ser Pro Gly Val Ser Gln Arg Lys Leu Met Arg |     |     |     |
| 305   | 610 | 615 | 620 |
| 308 Tyr His Ser Val Ser Thr Glu Thr Pro His Glu Arg Lys Asp Phe Glu |     |     |     |
| 309   | 625 | 630 | 635 |
| 312 Ser Lys Ala Asn His Leu Gly Asp Ser Gly Gly Thr Pro Val Lys Thr |     |     |     |
| 313   | 645 | 650 | 655 |
| 316 Arg Arg His Ser Trp Arg Gln Gln Ile Phe Leu Arg Val Ala Thr Pro |     |     |     |
| 317   | 660 | 665 | 670 |
| 320 Gln Lys Ala Cys Asp Ser Ser Arg Tyr Glu Asp Tyr Ser Glu Leu     |     |     |     |
| 321   | 675 | 680 | 685 |
| 324 Gly Glu Leu Pro Pro Arg Ser Pro Leu Glu Pro Val Cys Glu Asp Gly |     |     |     |
| 325   | 690 | 695 | 700 |
| 328 Pro Phe Gly Pro Pro Pro Glu Glu Lys Lys Arg Thr Ser Arg Glu Leu |     |     |     |
| 329   | 705 | 710 | 715 |
| 332 Arg Glu Leu Trp Gln Lys Ala Ile Leu Gln Gln Ile Leu Leu Leu Arg |     |     |     |
| 333   | 725 | 730 | 735 |
| 336 Met Glu Lys Glu Asn Gln Lys Leu Gln Ala Ser Glu Asn Asp Leu Leu |     |     |     |
| 337   | 740 | 745 | 750 |
| 340 Asn Lys Arg Leu Lys Leu Asp Tyr Glu Glu Ile Thr Pro Cys Leu Lys |     |     |     |
| 341   | 755 | 760 | 765 |
| 344 Glu Val Thr Thr Val Trp Glu Lys Met Leu Ser Thr Pro Gly Arg Ser |     |     |     |
| 345   | 770 | 775 | 780 |
| 348 Lys Ile Lys Phe Asp Met Glu Lys Met His Ser Ala Val Gly Gln Gly |     |     |     |
| 349   | 785 | 790 | 795 |
| 352 Val Pro Arg His His Arg Gly Glu Ile Trp Lys Phe Leu Ala Glu Gln |     |     |     |
| 353   | 805 | 810 | 815 |
| 356 Phe His Leu Lys His Gln Phe Pro Ser Lys Gln Gln Pro Lys Asp Val |     |     |     |
| 357   | 820 | 825 | 830 |
| 360 Pro Tyr Lys Glu Leu Leu Lys Gln Leu Thr Ser Gln Gln His Ala Ile |     |     |     |
| 361   | 835 | 840 | 845 |
| 364 Leu Ile Asp Leu Gly Arg Thr Phe Pro Thr His Pro Tyr Phe Ser Ala |     |     |     |
| 365   | 850 | 855 | 860 |
| 368 Gln Leu Gly Ala Gly Gln Leu Ser Leu Tyr Asn Ile Leu Lys Ala Tyr |     |     |     |
| 369   | 865 | 870 | 875 |
|   |     |     | 880 |

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372 Ser Leu Leu Asp Gln Glu Val Gly Tyr Cys Gln Gly Leu Ser Phe Val  
 373 885 890 895  
 376 Ala Gly Ile Leu Leu Leu His Met Ser Glu Glu Glu Ala Phe Lys Met  
 377 900 905 910  
 380 Leu Lys Phe Leu Met Phe Asp Met Gly Leu Arg Lys Gln Tyr Arg Pro  
 381 915 920 925  
 384 Asp Met Ile Ile Leu Gln Ile Gln Met Tyr Gln Leu Ser Arg Leu Leu  
 385 930 935 940  
 388 His Asp Tyr His Arg Asp Leu Tyr Asn His Leu Glu Glu His Glu Ile  
 389 945 950 955 960  
 392 Gly Pro Ser Leu Tyr Ala Ala Pro Trp Phe Leu Thr Met Phe Ala Ser  
 393 965 970 975  
 396 Gln Phe Pro Leu Gly Phe Val Ala Arg Val Phe Asp Met Ile Phe Leu  
 397 980 985 990  
 400 Gln Gly Thr Glu Val Ile Phe Lys Val Ala Leu Ser Leu Leu Gly Ser  
 401 995 1000 1005  
 404 His Lys Pro Leu Ile Leu Gln His Glu Asn Leu Glu Thr Ile Val  
 405 1010 1015 1020  
 408 Asp Phe Ile Lys Ser Thr Leu Pro Asn Leu Gly Leu Val Gln Met  
 409 1025 1030 1035  
 412 Glu Lys Thr Ile Asn Gln Val Phe Glu Met Asp Ile Ala Lys Gln  
 413 1040 1045 1050  
 416 Leu Gln Ala Tyr Glu Val Glu Tyr His Val Leu Gln Glu Glu Leu  
 417 1055 1060 1065  
 420 Ile Asp Ser Ser Pro Leu Ser Asp Asn Gln Arg Met Asp Lys Leu  
 421 1070 1075 1080  
 424 Glu Lys Thr Asn Ser Ser Leu Arg Lys Gln Asn Leu Asp Leu Leu  
 425 1085 1090 1095  
 428 Glu Gln Leu Gln Val Ala Asn Gly Arg Ile Gln Ser Leu Glu Ala  
 429 1100 1105 1110  
 432 Thr Ile Glu Lys Leu Leu Ser Ser Glu Ser Lys Leu Lys Gln Ala  
 433 1115 1120 1125  
 436 Met Leu Thr Leu Glu Leu Glu Arg Ser Ala Leu Leu Gln Thr Val  
 437 1130 1135 1140  
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 458 ccctgggttg tggctgaggt gcgaagactc agcaggcagt ccaccagaaa ggaacctgta 180  
 460 accaagcaag tccggctttcg cgtttcaccc tctggactga gatgtgaacc tgagccagg 240  
 462 agaagtcaac agtggatcc cctgatctat tccagcatct ttgagtgcaa gcctcagcgt 300  
 464 gttcacaaac tgattcacaa cagtcatgac ccaagttact ttgcttgtct gattaaggaa 360

RAW SEQUENCE LISTING ERROR SUMMARY                   DATE: 12/27/2006  
PATENT APPLICATION: US/10/655,543A               TIME: 13:54:27

Input Set : N:\efs\12\_27\_06\10655543A\_efs\1312-03-2006-12-21-

Output Set: N:\CRF4\12272006\J655543A.raw

HLL-ST25.txt

FYI

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:27; Xaa Pos. 59,520,525

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/655,543A

DATE: 12/27/2006

TIME: 13:54:27

**HLL-ST25.txt**

Input Set : N:\efs\12\_27\_06\10655543A\_efs\1312-03-2006-12-21-

Output Set: N:\CRF4\12272006\J655543A.raw

L:3463 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:48  
M:341 Repeated in SeqNo=27